APPENDIX 16: ADEQUACY OF WATER QUALITY STANDARDS AND GUIDELINES

The following discusses the adequacy of the Water Quality Standards and Guidelines in the different alternatives in meeting the requirements identified in 43 CFR 4181.2. The standards listed are the Water Quality Standards and Guidelines for the individual RACs, from Alternative 1; the State-wide Water Quality Standard from Alternative 2 and the Standards and Guidelines from Alternative 4. The Fallback Standards and Guidelines from Alternative 3, which are verbatim repeated from the regulations, are also listed, but they fail to specifically address water quality requirements. The proposed action, Alternative 5, modified and expanded the standards and guidelines from Alternative 1 in an attempt to meet the concerns identified in the draft EIS, including the following analysis of the alternatives, comments to the draft EIS, and suggestions from State, Regional and other Federal agencies.

ALTERNATIVE 1

In December 1996 a BLM-wide team reviewed all of the recommended RAC standards and guidelines for California while reviewing standard and guideline submissions for some of the other western states that were preparing their recommendation to the Secretary of the Interior for final approval. The comments and recommendations from the team for California's RAC recommendations that specifically address water quality are incorporated in this discussion. This group did not see or address the other alternatives.

BAKERSFIELD RAC RECOMMENDATIONS

<u>Standards</u> -- The water quality standard is "Surface and ground water complies with California, or other appropriate (e.g. Nevada or Tribal water quality standards").

The review team commented: The "meaning that" portion of the water quality standard is phrased in the terminology of a guideline, i.e., actions, techniques and practices to achieve a standard, rather than further defining the standard as a clear statement of condition or function.

<u>Guidelines</u> -- Guidelines 1, 2, 5, 9, 10 and 13 support water quality needs. Guidelines 12, 14 and 15 are more directly supportive to water quality needs in protection of water sources and riparian/wetland areas; and Guideline 16 states to "implement grazing systems that will promote compliance with Water Quality Standards".

Overall the guidelines adequately provide for most anticipated grazing activities that may influence water quality. An additional guideline that might have been included that would have improved the guidelines is the development of any water gaps on streams would provide for hardened watering access for livestock watering purposes.

UKIAH RAC RECOMMENDATIONS

<u>Standards</u> -- The water quality standard is "With the exception of off-stream artificial impoundments, surface and groundwater quality complies with California, Tribal and Federal water quality standards (WQS)".

The review team commented: The opening phrase sets up an exception to the standard, thus obscuring the level of condition or degree of function to be attained. The "meaning that" portion of the water quality standard is phrased in the terminology of a guideline, i.e., actions, techniques, and practices to achieve a standard, rather than further defining the standard as a clear statement of condition or function.

The exception identified for "off-stream, artificial impoundments," that structural facilities constructed for livestock grazing and other purposes are to be exempted from meeting the state water quality standards, raises the concern that those sites may not meet the non-degradation objectives for water quality for non-point sources, and might therefore be subject to more stringent regulation similar to point sources of pollution (including the requirement of obtaining a permit).

<u>Guidelines</u> -- The review team commented: Guiding principles are not addressed in the guidelines for "maintaining, restoring, or enhancing water quality".

Guidelines 2, 3, 4, 5 and 7 for riparian areas and Guideline 3 for annual upland ranges support water quality protection. A possible additional guideline might have been included that said the development of any water gaps on streams would provide for hardened watering access for livestock watering purposes.

SUSANVILLE RAC RECOMMENDATIONS

<u>Standards</u> -- The water quality standard is "At a minimum, water quality is adequate for desired beneficial use of water resources on public lands."

The review team commented: The water quality standard does not specifically refer to State water quality standards as addressed in Fundamental (c). The statement "adequate for desired beneficial use" does not indicate whose desired beneficial use is established. Use of the word "desired" in the standard does not indicate a clear level of condition or degree of function.

<u>Guidelines</u> -- The review team commented: Guiding principles are addressed for "maintaining, restoring, or enhancing water quality".

Although guideline 1 supports minimizing impacts from grazing activities along steams by emphasizing use level and trampling that would in turn improve water quality, there is a lack of guidelines addressing specific types of measures to help prevent livestock related water quality influences at or near water sources such as minimizing concentrations of livestock and influences to water quality and establishing determinable threshold parameters for grazing management in these areas.

STATE-WIDE CONSISTENCY/CONSOLIDATED STANDARDS AND GUIDELINES -- ALTERNATIVE 2

<u>Standards</u> -- The water quality standard is: "Water will have the characteristics suitable for existing or potential beneficial uses".

This standard was developed with the intent of leaving some flexibility in meeting specific state numerical water quality standards, particularly for drinking water, as identified in some of California's Regional Basin Plans. The rationale for this approach is based upon a difference in interpretation and opinion about the applicability of the state's numerical objectives for drinking water to livestock grazing activities. One interpretation is that strict adherence to the numerical standards would only apply where the water is actually used for drinking water purposes and the water could not be treated for potable purposes or where the water must meet the standard prior to any treatment. The other interpretation is that the state's numerical standards apply no matter what the circumstance.

This alternative focuses on working with the State of California and the Regional Boards to revisit the Basin Plans, and make new determinations of the beneficial uses. The intent is that BLM and the State of California would jointly determine what the new standards would be.

Although the description of this standard explains cooperative processes for BLM and the State of California to jointly determine what standards may be applicable for grazing on public land, it does not address BLM's need to adhere to existing standards established by both California and Nevada and the Indian tribes where appropriate.

<u>Guidelines</u> -- The guidelines are the same as the RAC guidelines for the respective RAC areas in the proposed action.

FALLBACK STANDARDS AND GUIDELINES -- ALTERNATIVE 3

<u>Standards</u> -- There is no standard for water quality in this alternative. It therefore fails to meet the requirements of the regulations.

<u>Guidelines</u> -- There is no guideline that specifically addresses water quality under this alternative, although Guidelines 3, 4, 13, and 14 address riparian, wetland and stream channel functioning condition, thereby indirectly addressing the issue.

RAPID IMPROVEMENT/RAPID RECOVERY STANDARDS AND GUIDELINES -- ALTERNATIVE 4

<u>Standards</u> -- The standard is: "Surface and groundwater quality complies with California or Nevada, and other appropriate (e.g. Tribal) water quality standards."

The standard and it's supportive description clearly meet the requirements of the Fundamentals. For this standard as well as for the other proposed standards, a reference to the documents that actually identify the standards, such as referring to the water quality objectives identified in the California Regional Basin Plans and the State of Nevada's water

quality regulations, would give the standard a more localized relationship to the BLM situation in California.

<u>Guidelines</u> -- Guideline 10 directs implementation to meet water quality objectives, but is not specific about how this should be done. Similarly, it is implied in guideline 1 that the listed set of adjustments would be applied appropriately for protecting water quality; however, it may not be clear what specific types of situations would occur for any of these guidelines to be applied. Also there are no guidelines for specifically minimizing livestock concentration influences to water quality.

THE PROPOSED ACTION -- ALTERNATIVE 5

<u>Standards</u> -- These standards modified and expanded the standards identified in Alternative 1 and developed consistent standards for all three RAC areas. The description of the standards further describes the indicators for water quality and more specifically reference meeting the water quality requirements of both States and the basic applications of management such as implementing best management practices and monitoring. Exceptions to the standards for stockwater facilities were further defined, which had been an issue of concern and confusion during the development of the draft EIS.

<u>Guidelines</u> -- In addition to retaining the existing water quality guidelines from Alternative 1, guidelines were added that emphasize the application of best management practices (BMPs) and that management attention be focused where water quality may be impaired or threatened from grazing activities. Recognizing the BMPs in this alternative as part of the guidelines should alleviate some of the concern about management related omissions in some of the other alternatives.